

1 **WHAT IS CLAIMED IS:**

2 1. A security system for a building, the system comprising:

3 at least one sensor installed inside the building to monitor environment
4 data, wherein a memory is built inside the at least one sensor to store a default
5 value, and the default value is applied to compare to subsequent environment
6 data recorded by the at least one sensor;

7 at least one image capture device installed at a particular place near the
8 at least one sensor to capture image data where said at least one sensor monitors
9 the particular place;

10 a control unit communicating with said at least one sensor and said at
11 least one image capture device, wherein the control unit receives signals output
12 from the at least one sensor and controls the at least one image capture device to
13 capture image data;

14 a communication interface, which serves as an interface between the
15 control unit and the Internet or a mobile telecommunication network, whereby
16 the captured image data is transmitted to a cell phone owned by a responsible
17 person of the building; wherein the control unit is able to dial an emergency
18 telephone number through the Internet to a police authority or a security service
19 firm; and

20 an alarming device connected to the control unit to generate alarming
21 signals.

22 2. The security system as claimed in claim 1, wherein said at least one
23 sensor is an infrared sensor.

24 3. The security system as claimed in claim 1, wherein said at least one

1 sensor is an ultrasonic sensor.

2 4. The security system as claimed in claim 1, wherein said at least one
3 sensor is a CCD camera.

4 5. The security system as claimed in claim 1, wherein said at least one
5 sensor is a CMOS camera.

6 6. The security system as claimed in claim 1, wherein said at least one
7 image capture device is a CCD camera.

8 7. The security system as claimed in claim 1, wherein said at least one
9 image capture device is a CMOS camera.

10 8. The security system as claimed in claim 1, wherein the at least one
11 sensor and the at least one image capture device are connected to the control unit
12 via power lines, and multiple power line carriers are respectively connected to
13 the at least one sensor, the at least one image capture device and the control unit;
14 wherein transmitting data over the power lines are modulated or
15 demodulated by the power line carriers.

16 9. The security system as claimed in claim 2, wherein the at least one
17 sensor and the at least one image capture device are connected to the control unit
18 via power lines, and multiple power line carriers are respectively connected to
19 the at least one sensor, the at least one image capture device and the control unit;
20 wherein transmitting data over the power lines are modulated or
21 demodulated by the power line carriers.

22 10. The security system as claimed in claim 3, wherein the at least one
23 sensor and the at least one image capture device are connected to the control unit
24 via power lines, and multiple power line carriers are respectively connected to

1 the at least one sensor, the at least one image capture device and the control unit;
2 wherein transmitting data over the power lines are modulated or
3 demodulated by the power line carriers.

4 11. The security system as claimed in claim 4, wherein the at least one
5 sensor and the at least one image capture device are connected to the control unit
6 via power lines, and multiple power line carriers are respectively connected to
7 the at least one sensor, the at least one image capture device and the control unit;
8 wherein transmitting data over the power lines are modulated or
9 demodulated by the power line carriers.

10 12. The security system as claimed in claim 5, wherein the at least one
11 sensor and the at least one image capture device are connected to the control unit
12 via power lines, and multiple power line carriers are respectively connected to
13 the at least one sensor, the at least one image capture device and the control unit;
14 wherein transmitting data over the power lines are modulated or
15 demodulated by the power line carriers.

16 13. The security system as claimed in claim 6, wherein the at least one
17 sensor and the at least one image capture device are connected to the control unit
18 via power lines, and multiple power line carriers are respectively connected to
19 the at least one sensor, the at least one image capture device and the control unit;
20 wherein transmitting data over the power lines are modulated or
21 demodulated by the power line carriers.

22 14. The security system as claimed in claim 7, wherein the at least one
23 sensor and the at least one image capture device are connected to the control unit
24 via power lines, and multiple power line carriers are respectively connected to

1 the at least one sensor, the at least one image capture device and the control unit;
2 wherein transmitting data over the power lines are modulated or
3 demodulated by the power line carriers.

4 15. The security system as claimed in claim 1, wherein the at least one
5 sensor and the at least one image capture device communicate to the control unit
6 wirelessly;

7 wherein multiple radio signal transceivers are respectively connected to
8 the at least one sensor, the at least one image capture device and the control unit.

9 16. The security system as claimed in claim 2, wherein the at least one
10 sensor and the at least one image capture device communicate to the control unit
11 wirelessly;

12 wherein multiple radio signal transceivers are respectively connected to
13 the at least one sensor, the at least one image capture device and the control unit.

14 17. The security system as claimed in claim 3, wherein the at least one
15 sensor and the at least one image capture device communicate to the control unit
16 wirelessly;

17 wherein multiple radio signal transceivers are respectively connected to
18 the at least one sensor, the at least one image capture device and the control unit.

19 18. The security system as claimed in claim 4, wherein the at least one
20 sensor and the at least one image capture device communicate to the control unit
21 wirelessly;

22 wherein multiple radio signal transceivers are respectively connected to
23 the at least one sensor, the at least one image capture device and the control unit.

24 19. The security system as claimed in claim 5, wherein the at least one

1 sensor and the at least one image capture device communicate to the control unit
2 wirelessly;

3 wherein multiple radio signal transceivers are respectively connected to
4 the at least one sensor, the at least one image capture device and the control unit.

5 20. The security system as claimed in claim 6, wherein the at least one
6 sensor and the at least one image capture device communicate to the control unit
7 wirelessly;

8 wherein multiple radio signal transceivers are respectively connected to
9 the at least one sensor, the at least one image capture device and the control unit.